Replacement page 8 of the specification

In the present invention, manganese dioxide such as electrolytic manganese dioxide (EMD; MnO_2) and chemical manganese dioxide (CMD; MnO_2), Mn_2O_3 and Mn_3O_4 can be used as the raw material.

The mechanical force applied to said manganese compound is preferably approximately 0.1 to 1000 dyne/cm2, in which range the three-dimensional destruction of the aggregated particles does not occur. Since mechanical energy removes edge parts of an angular shaped manganese compund used as the raw material to make it globular, when preparing an electrode from lithium manganese spinel complex oxide that is prepared using a MH-treated manganese compound as a raw material, the surface friction between particles decreases and the true density can be improved. The amount of time of applying mechanical energy and heat energy is preferably 5 minutes to 5 hours. If the time exceeds 5 hours, the particle shape of the prepared manganese compound becomes more spherical, but the disadvantages in terms of operating cost and time are too high. If the time is less than 5 minutes, it is difficult to sufficiently remove defects. The temperature range of heat energy is preferably 50 to 200°C.

In said MH-treatment, preparations that make the treatment easy can be added. Preferable preparations include a lithium salt such as LiOH, $LiOH \cdot H_2O$, $LiCH_3COO$, $LiCHO_2$, $LiCHO_2 \cdot H_2O$, $LiNO_3$, and $Mn(CH_3CO_2)_2$, $Mn(NO_3)_2$ and a transition metal salt having a melting point of less than 200°C, and mixtures of other metal compounds and the above compounds. The amount of the preparations is preferably 0 to 20 wt% of the treated manganese compound. In addition, in a method of preparing lithium manganese complex oxide $Li_{1+x}Mn_{2-x}O_4$ (0 x 0.12) with a spinel structure comprising the steps of mixing lithium compound and said manganese compound and calcinating the mixture, said lithium compound is preferably selected from a lithium salt group consisting of LiOH, , $LiOH \cdot H_2O$, $LiCH_3COO$, $LiCHO_2$, $LiCHO_2 \cdot H_2O$ and $LiNO_3$. In addition, the temperature of calcination is 400 to 900°C, and the time of calcinations is 1 to 30 hours.